

Decision **PROPOSED DECISION OF ALJ SIMON** (Mailed 12/14/2004)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Application of the Pasadena Avenue Monterey Road Committee for variance of General Order 143B and authority to explore and enter into negotiations for consideration and implementation pursuant to Public Utilities Code (PUC) §§ 1202, 7604 as a pilot project as permitted by SB 1491.

Application 03-01-013  
(Filed January 16, 2003)

Application of the Pasadena Avenue Monterey Road Committee and City of South Pasadena for Variance of General Order 75-C.

Application 03-07-049  
(Filed July 25, 2003)

In the Matter of the Application of the City of South Pasadena for Approval of Ordinance 2121 Relating to Limitations of Train Speeds Pursuant to Section 7658 of the California Public Utilities Code.

Application 03-07-050  
(Filed July 25, 2003)

(See Appendix B for List of Appearances.)

**OPINION ADOPTING SETTLEMENT  
AND GRANTING APPLICATIONS IN PART**

**1. Summary**

In these consolidated cases, we adopt, with some additional conditions, a settlement among the City of South Pasadena (City), the Los Angeles County

Metropolitan Transportation Authority (LACMTA), and the Los Angeles to Pasadena Metro Blue Line Construction Authority (Construction Authority). The settlement commits the settling parties to making certain improvements to warning devices at the at-grade crossings in the City and to taking other measures to reduce noise from the operations of light rail vehicles on LACMTA's Gold Line in the City. We also grant in part the application of the Pasadena Avenue Monterey Road Committee (PAMRC) to allow the bells on crossing gate arms at certain at-grade Gold Line crossings in the City to be silenced after the gate arms have descended.

## **2. Procedural Background**

These applications are among a series of applications related to the construction of the Los Angeles to Pasadena Blue Line light rail system.<sup>1</sup> Unlike the other applications, which were filed by the Construction Authority for permission to construct a number of crossings for the light rail system, these applications were filed by PAMRC, a community group in South Pasadena, and the City. In Application (A.) 03-01-013, PAMRC requests that variances from some of the requirements of General Order (GO) 143-B be granted to eliminate the sounding of horns or other audible warning devices by Gold Line trains in South Pasadena. In A.03-07-049, the City and PAMRC request a variance from GO 75-C to limit or eliminate the sounding of bells on the crossing gates at all eight South Pasadena at-grade crossings of the Gold Line.<sup>2</sup> In A.03-07-050, the

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<sup>1</sup> Since the initial applications were filed, the line has been renamed the Gold Line. That name will be used here.

<sup>2</sup> Resolution SX-58 (September 4, 2003) approved a request by LACMTA to permit the silencing of bells after crossing gate arms have lowered at five at-grade crossings in the

*Footnote continued on next page*

City requests, pursuant to Pub. Util. Code § 7658, that the Commission approve the City's Ordinance 2121, which, among other things, would impose a speed limit of 20 miles per hour (mph) on Gold Line trains in South Pasadena.<sup>3</sup> The three applications were consolidated by the Assigned Commissioner's ruling in the revised scoping memo dated October 30, 2003.<sup>4</sup>

In its initial application, A.03-01-013, PAMRC requested that the Gold Line in parts of South Pasadena be designated a "no horn" zone, as a pilot program under § 1202(d). This request was dismissed by the Administrative Law Judge (ALJ) because it was made too late to be included in the statutory pilot program. PAMRC's initial requests related to crossing warning devices were also dismissed because GO 143-B—the basis of the application—does not apply to crossing warning devices. The requests for a variance in the requirements for horns to be sounded and for a 20 mph speed limit for Gold Line trains in the City were allowed to proceed. (See Administrative Law Judge's Ruling on

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City. Therefore, this decision addresses the silencing of the bells after the gate arms descend at the three other crossings in the City. PAMRC has also requested that bells not sound at all at any crossing in the City. This request is discussed in Section 4.2.

<sup>3</sup> Unless otherwise indicated, all subsequent citations to sections refer to the Public Utilities Code, and citations to rules refer to the Rules of Practice and Procedure, which are codified at Chapter 1, Division 1 of Title 20 of the California Code of Regulations.

<sup>4</sup> Notice of A.03-01-013 was published in the Commission Daily Calendar on January 21, 2003. LACMTA filed a timely protest to A.03-01-013 on February 20, 2003. The Construction Authority filed a timely response to A.03-01-013 on February 20, 2003. Notice of A.03-07-049 was published in the Commission Daily Calendar on August 6, 2003. LACMTA filed a timely protest to A.03-07-049 on September 5, 2003. Notice of A.03-07-050 was published in the Commission Daily Calendar on August 6, 2003. LACMTA filed a timely protest to A.03-07-049 on September 5, 2003.

Preliminary Legal Issues, Requiring Prehearing Conference Statements, and Allowing Late Filing of Reply Brief (June 30, 2003), which we now confirm.)

After the proceedings were consolidated, an evidentiary hearing (EH) was originally set for January 26, 2004. At the request of the parties, the EH was rescheduled to April 12, 2004. After written testimony had been distributed for the EH, the City, LACMTA, and the Construction Authority (settling parties) filed a Motion of the City of South Pasadena, Los Angeles to Pasadena Metro Blue Line Construction Authority and Los Angeles County Metropolitan Transportation Authority for Adoption of Proposed Settlement on April 1, 2004. A copy of the proposed settlement (settlement) is attached as Appendix A. PAMRC contested the settlement. Pursuant to Rules 51.4-51.6, all parties filed comments and responses on the settlement, concluding on June 22, 2004.

PAMRC's comments made a showing that there were contested factual issues related to the effectiveness of the settlement in reducing noise impacts on South Pasadena residents from Gold Line operations. In view of the longstanding public interest in the construction and operation of the Gold Line, the Commission held a public participation hearing (PPH) in South Pasadena on August 24, 2004, to address the settlement and other public concerns about Gold Line operations related to these proceedings.

In accordance with Rule 51.6, a limited evidentiary hearing (LEH) was held on August 31, 2004, in San Francisco to address the extent to which the proposed settlement reduces or mitigates noise levels in South Pasadena from the current operation of the Gold Line and the safety considerations relevant to the noise reduction or mitigation provisions of the proposed settlement. Witnesses at the LEH provided testimony on noise measurements and noise impacts and on safety issues.

Concurrent closing briefs were filed by all parties on September 20, 2004, and this matter was submitted on that date.

### **3. Statement of Facts**

#### **3.1 Gold Line Operations**

For many years, the tracks where the Gold Line now runs were used for passenger and freight traffic. Most recently, about half a dozen freight trains a day, moving at approximately 20-25 mph, ran through the City.

The Gold Line has eight at-grade crossings and one station within a less than two-mile stretch in the City.<sup>5</sup> About 200 trains per day, at intervals as short as five minutes, run through the City, with a speed limit of 45 mph.

Each train sounds its “quacker” in a pattern of two long blasts as it approaches each at-grade crossing. The quacker sound measures at least 75 dBA<sup>6</sup> at a distance of 100 feet from the vehicle. (See GO 143-B.) LACMTA’s safety expert testified that he believed, based on his own perception and anecdotal evidence, that the quacker sound is less annoying to neighboring residents than that of a traditional horn.

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<sup>5</sup> Going from south to north, the crossings are: Arroyo Verde Road and Sycamore Avenue; Pasadena Avenue and Monterey Road; Indiana Avenue; Orange Grove Avenue; El Centro Street and Glendon Way; Mission Street and Meridian Avenue; Hope Street; Fremont Avenue and Grevalia Street. The Mission station is close to the Mission/Meridian crossing.

<sup>6</sup> Sound intensity is measured using “decibels.” The A-weighted decibel (dBA) measure takes into account the sensitivity of human hearing, which does not hear all sound frequencies equally. Sounds ranging from approximately 3 dBA to 140 dBA fall within human hearing range. The scale is logarithmic: an increase in 10 dBA means that the sound is perceived as twice as loud.

At each crossing, there are Standard No. 9 warning devices. (See GO 75-C.) The crossings have flashing lights, bells, and, with one exception, four-quadrant crossing gates.<sup>7</sup> Typically, about 30 seconds before a train arrives at the crossing, electronic circuitry detects the train's approach and activates the flashing lights and bells simultaneously. The bells sound at a level of 85-90 dBA. About three seconds later, the entrance gate arm begins to descend; it reaches horizontal about eight seconds later.<sup>8</sup> The exit gate will descend approximately seven or eight seconds after the entrance gates, unless the vehicle detection system detects a vehicle in the crossing. In that case, the exit gate does not descend, allowing the motorist to exit the crossing. A pedestrian gate arm also descends. An adjacent swing gate allows emergency exit from the crossing for a pedestrian.

After the entrance gate arms are horizontal, the bells silence at those crossings where such silencing has been approved.<sup>9</sup> At the three other crossings, the bells continue to sound until the warning cycle is completed.<sup>10</sup> After the rear of the train has cleared the intersection by about 100 to 200 feet, electronic circuitry detects the train's departure and signals the gates to rise; the lights continue to flash until the gates are vertical.

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<sup>7</sup> The El Centro/Glendon Way crossing, which has a T shape, has standard gates rather than four-quadrant gates.

<sup>8</sup> If for any reason the crossing arms were to fail to descend completely, the flashing lights and bells would continue to operate until the train has cleared the crossing.

<sup>9</sup> These are: Arroyo Verde Road and Sycamore Avenue; Indiana Avenue; Orange Grove Avenue; Hope Street; Fremont Avenue and Grevalia Street.

<sup>10</sup> Pasadena Avenue and Monterey Road; El Centro Street and Glendon Way; Mission Street and Meridian Avenue.

The overall background noise level on the streets in South Pasadena is approximately 55-60 dBA. The noise of Gold Line operations is perceived by many City residents as very loud and intrusive, especially at night. The ability of sound to cause annoyance is increased if the sound has relatively pure tones, such as crossing bells and traditional train horns. The impact of some noise of Gold Line operations is reduced by the presence of sound walls along certain sections of the Gold Line route, but sound walls cannot be used at crossings.

### **3.2 Proposed Settlement**

The proposed settlement addresses a number of issues related to noise from Gold Line operations in South Pasadena. It allocates responsibility among the three settling parties for taking steps to implement various provisions. Those provisions that address the relief requested in the applications are discussed below.

#### **3.2.1 Horns**

When Gold Line operations began, the trains sounded their horns in a long-short-long-short pattern on approaching each station and each at-grade crossing. In the settlement, LACMTA affirms that its current operational directives require two long soundings of the quacker low horn as a train approaches a crossing.

#### **3.2.2 Bells**

The Construction Authority will calibrate and reduce the noise levels of the bells and install noise shrouds on the bells at all Gold Line crossings in the City. LACMTA undertakes not to oppose any effort by the City to seek approval for the silencing of bells on all crossings in the City.

The settlement also sets out a plan for a study of silencing both bells and horns in the City between the hours of 10 p.m. and 6 a.m. The settling parties

contemplate that such a study would be initiated by the City and supervised by Commission staff.

### **3.2.3 Other Noise Reduction Measures**

LACMTA will install rail lubricators of the type currently installed near the Southwest Museum station at Orange Grove Avenue and Mound Avenue.

The Construction Authority will provide sound walls in certain areas identified in the settlement agreement. It will also provide clear Plexiglas sound wall extensions, provided that the Commission and LACMTA approve their use and the City agrees to maintain them. The Construction Authority will also provide sound insulation for affected structures identified in the settlement agreement.

### **3.2.4 Crossing Design**

The Construction Authority will alter the crossing gates on the northwest side of the rail lines at Mission Street and Meridian Avenue so that they will be parallel to the right of way. If the City funds the installation from its share of certain funds allocated by the Construction Authority, the Construction Authority will also install four-quadrant gates at the Glendon Way/El Centro crossing.

### **3.2.5 Other Provisions**

The City agrees to rescind its Ordinance 2121, which is the basis for its request in A.03-07-050 for approval of a 20 mph speed limit for trains within City limits, within 30 days of approval of the settlement. The City agrees to seek dismissal of A.03-07-049 and A.03-07-050 if those proceedings are not closed within 30 days of the approval of the settlement. The City agrees to assist LACMTA and the Construction Authority in implementing the measures those agencies have agreed to in the settlement. The City also agrees to bear the cost of



any “supplemental safety device or system” that could be required as a result of any of the further study or Commission action on silencing bells and/or horns in the City that are contemplated by the settlement.

The settlement agreement contains a number of other provisions that address issues that are outside the parameters of the relief requested in these consolidated applications. Examples of such provisions are mutual waivers of claims for attorneys fees and the development of a fund to buy out some properties close to the Gold Line.

#### **4. Discussion**

We note at the outset the limited nature of the relief requested in the applications: the elimination of horn soundings in the City (A.03-01-013); the silencing of bells at all crossings in the City (A.03-07-049); and the imposition of a speed limit of 20 mph on Gold Line trains in the City (A.03-01-013; A.03-07-050). We evaluate the settlement in light of these requests and analyze its effectiveness in relation to them.

The settlement addresses a number of elements contributing to operational noise on the Gold Line: bells, horns, wheel squeal, and overall passby noise (the sum of all noise made by the train’s travel past the observer). Both the testimony at the LEH and the settlement itself demonstrate that there are many areas in which efforts to reduce noise can and should be made. It is not possible to determine, prior to the implementation of the steps in the settlement, whether the noise issues that prompted these applications will be fully resolved by the measures proposed by the settling parties and the additional measures we impose. As discussed in detail below, these measures will, however, quickly reduce the impact of some of the noise sources of most concern to residents.

Until these measures have been implemented, it is premature to conclude that more drastic noise remedies are needed.

#### **4.1 Bells**

The settling parties have committed to reducing the noise from the bells at the crossings. South Pasadena is not an area with very loud ambient noise levels, requiring loud bells to cut through the noise to gain the attention of pedestrians and motorists at crossings. Expert witnesses at the LEH agreed that there is no safety reason to maintain the current 85-90 dBA level of the bells, rather than the 75 dBA minimum level required by GO 75-C.

Also contributing to concern about the loudness of the bells is the fact that they sound in a 360-degree area. The Construction Authority has identified bell “shrouds” as a method of reducing the spread of the bell sounds. The settlement commitments are reasonable steps to reduce noise without compromising safety at the crossings.

The Construction Authority’s agreement to lower the volume of the bells does not include either a target sound level or a deadline for completing the work. We believe that both are necessary. The work to lower the sound of the bells and install the noise shrouds at all crossings in the City should be completed within 60 days of the date of this decision. The target for reducing the noise level of the bells is 75 dBA measured 10 feet from the face of the bell, after installation of the shrouds. In no event may any of the bells be louder than 77 dBA measured 10 feet from the face of the bell after installation of the shrouds.

The settlement agreement states that the reduction in bell noise and installation of noise shrouds are subject to the approval of both the Commission and LACMTA. We do not understand this to allow LACMTA to veto the measures we are approving, and explicitly state here that the Construction

Authority is required to take the steps it has agreed to. The Construction Authority must also notify LACMTA, the City, PAMRC, and Commission staff when they have completed the work on the bells at each crossing, and promptly provide information that will allow all parties to verify that the required noise reductions have been made.

The record also demonstrates that the bells may safely be silenced after the crossing arms descend at the three crossings in the City not previously allowed in Resolution SX-58. The record developed at the PPH shows that housing is common along the Gold Line, even in and near commercial areas. This residential use near the Gold Line makes the bells at all crossings a noise issue for City residents. Both the City's and LACMTA's witnesses at the LEH agreed that the experience with the five crossings covered by Resolution SX-58 demonstrated that the bells could safely be silenced at all crossings after the gate arms had descended. The Construction Authority and LACMTA should make this change at Mission/Meridian and Pasadena Avenue/Monterey Road within 15 days of the date of this decision. For El Centro/Glendon Way, the silencing of bells after the crossing arms descend should be implemented promptly after the installation of the four-quadrant gates, pedestrian gates, and swing gates, to provide the same safety features as at the other crossings prior to silencing the bells.

Based on operating conditions in other parts of LACMTA's system, and systems in other cities, PAMRC hypothesizes that imposing a 20 mph speed limit on Gold Line trains would allow bells (as well as horns) to be completely silenced without compromising safety. This hypothesis was not supported by the testimony at the LEH.

## **4.2 Horns**

These proceedings began with PAMRC's request that LACMTA run Gold Line trains through the City without sounding any type of horn. While the density of at-grade crossings in the City makes the use of the horns conspicuous, that very density also raises important safety issues if horns were not to be used. PAMRC has not shown that the use of horns may safely be eliminated by the imposition of a 20 mph speed limit or by any other changes in Gold Line operations.

During the course of the proceeding, LACMTA began using the quacker horn. In the judgment of LACMTA's staff, this type of horn has the least intrusive sound quality of the available horn options. In the settlement, LACMTA makes no commitment to its current practice of using the quacker and sounding it only twice on approaches to crossings. We will not impose such a commitment, but will require LACMTA to give other parties to this proceeding and Commission staff notice if it intends to change the operational sounding of horns on Gold Line trains in the City.

The settlement contemplates that the City may request involvement of Commission staff in a study of silencing horns and crossing bells under certain conditions. Our approval of the settlement is not advance approval of this study. Any request for such a study will be evaluated on its merits if and when received.

## **4.3 Other Noise Reduction Measures**

These measures do not directly address the applications' requests for relief with respect to bells, horns, or speed limits. By reducing the overall noise impacts from Gold Line operations, however, they may reduce the perceived need for more radical noise reduction steps that could compromise safety.

Wheel squeal is an annoying sound that is not related to any warning or safety functions. LACMTA has agreed to reduce wheel squeal by installing two new rail lubricators. Since these devices work by releasing lubricant onto the tracks, they will require regular inspection and maintenance to work properly. LACMTA should make maintenance of all the rail lubricators in the City a priority, though we will not impose any particular requirements for maintenance.

The Construction Authority has agreed to provide additional mechanical barriers, including sound walls, clear Plexiglas sound wall extensions, and sound insulation for affected structures identified in the settlement agreement. The Plexiglas extensions, which would be near crossings, are specified to be subject to Commission approval. Our adoption of the settlement does not constitute approval of any particular proposal for installation of sound wall extensions. The settling parties will be responsible for seeking appropriate approval for any proposed sound wall extensions.

#### **4.4 Crossing Design**

The installation of four-quadrant gates at the El Centro/Glendon Way crossing is necessary before the bells at that crossing may be silenced after the gate arms descend. The settling parties are responsible for securing appropriate approval for installation of the gates.

#### **4.5 Other Provisions**

PAMRC objects to the City's agreement to rescind its Ordinance 2121, which is the basis for its request in A.03-07-050 for approval of a 20 mph speed limit for trains within City limits, within 30 days of approval of the settlement. This objection is out of place in these proceedings. The City has the power to adopt and repeal its own ordinances without our interference.

Our adoption of the settlement should not be read to imply either our approval or our disapproval of those terms that are not necessary to the resolution of the three applications in this consolidated proceeding. Further, as provided in Rule 51.8, our adoption of this settlement is binding on the parties, but is not precedential regarding any issue in these proceedings or any future proceedings.

## **5. Categorization**

The category of A.03-01-013 was preliminarily determined to be ratesetting in Resolution ALJ 176-3107 (February 13, 2003). The categorization was confirmed in the Scoping Memo and Ruling of Assigned Commissioner (April 28, 2003). The category of A.03-07-049 and A.03-07-050 was preliminarily determined to be ratesetting in Resolution ALJ 176-3117 (August 21, 2003). The categorization was confirmed in the Administrative Law Judge's Revised Scoping Memo and Ruling of Assigned Commissioner (October 20, 2003). An evidentiary hearing was held in the consolidated proceedings pursuant to Rule 51.6, governing contested settlements.

## **6. Comments on Proposed Decision**

The proposed decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(d) and Rule 77.1 of the Rules of Practice and Procedure.

## **7. Assignment of Proceeding**

Susan P. Kennedy is the Assigned Commissioner and Anne E. Simon is the assigned ALJ in this proceeding.

## **Findings of Fact**

1. Notice of A.03-01-013 was published in the Commission Daily Calendar on January 21, 2003.

2. LACMTA filed a timely protest to A.03-01-013 on February 20, 2003.
3. The Construction Authority filed a timely response to A.03-01-013 on February 20, 2003.
4. Notice of A.03-07-049 was published in the Commission Daily Calendar on August 6, 2003.
5. LACMTA filed a timely protest to A.03-07-049 on September 5, 2003.
6. Notice of A.03-07-050 was published in the Commission Daily Calendar on August 6, 2003.
7. LACMTA filed a timely protest to A.03-07-050 on September 5, 2003.
8. LACMTA, the Construction Authority, and the City are parties to the settlement, filed on April 1, 2004. PAMRC objects to the settlement.
9. Gold Line trains currently make two long soundings of the low quacker horn when approaching crossings in the City.
10. Gold Line trains may be operated safely with use of the quacker horn.
11. The warning bells at the eight at-grade crossings of the Gold Line in the City are at least twice as loud as the minimum required by GO 75-C.
12. The sound of the warning bells at the crossings is a source of concern to many City residents.
13. Gold Line trains may be operated safely if the warning bells sound at the minimum loudness required by GO 75-C.
14. Gold Line trains may be operated safely if the warning bells are silenced after the gate arms descend at crossings with four-quadrant gates, pedestrian gates, and adjacent swing gates.
15. Wheel squeal is a source of annoying sound in those parts of the Gold Line where it occurs.

16. The provisions of the settlement are reasonable in light of the whole record in this proceeding.

### **Conclusions of Law**

1. Consistent with Rule 51.1(e), the settlement is reasonable in light of the whole record, consistent with law, and in the public interest, and should be adopted.

2. Implementation of the settlement will be improved and expedited by implementation of the additional conditions as set forth in the following order.

3. A.03-01-013, A.03-07-049, and A.03-07-050 except as granted in the following order, should be denied.

4. In order to allow construction of the improvements in the settlement to proceed expeditiously, this order should be effective immediately.

## **O R D E R**

### **IT IS ORDERED** that:

1. The proposed settlement agreement among the Los Angeles to Pasadena Metro Blue Line Construction Authority (Construction Authority), Los Angeles County Metropolitan Transportation Authority (LACMTA), and City of South Pasadena (City), filed on April 1, 2004, is approved.

2. Not later than 60 days from the date of this decision, the Construction Authority shall install noise shrouds and shall ensure that the bells at all crossings of the Los Angeles to Pasadena Metro Gold Line (Gold Line) in the City ring with a loudness of no less than 75 dBA and no more than 77 dBA, measured 10 feet from the face of the bell after installation of the shrouds.

3. Not later than 75 days from the date of this decision, the Construction Authority shall provide as-built plans, sound test results and any other relevant



documentation demonstrating compliance with paragraph 2 of this order to Commission staff, City, LACMTA, and Pasadena Avenue Monterey Road Committee (PAMRC).

4. The Construction Authority shall allow Commission staff, on request, to test the loudness of the bells after completion of the work identified in paragraph 2 of this order.

5. Not later than 15 days from the date of this decision, the Construction Authority and LACMTA shall ensure that the bells at the Gold Line crossings at Pasadena Avenue and Monterey Road and Mission Street and Meridian Avenue are silenced after the crossing gate arms descend.

6. Not later than 15 days after four-quadrant gates, pedestrian gates, and swing gates are installed at the El Centro/Glendon Way crossing, the Construction Authority and LACMTA shall ensure that the bells at that crossing are silenced after the crossing gate arms descend.

7. If LACMTA considers changing its operational procedures from two long soundings of the quacker horn by Gold Line trains as they approach crossings in the City, it shall give at least 15 days' written notice of its intention to Commission staff, City, the Construction Authority, and PAMRC.

8. At such time as the Construction Authority is ready to alter crossing gates at Mission Street and Meridian Avenue, it must apply for Commission approval for the relocation.

9. At such time as the Construction Authority is ready to install four-quadrant gates at El Centro Street and Glendon Way, it must apply for Commission approval for the installation.

10. In all respects other than those set forth in paragraphs 1—10 above, Application (A.) 03-01-013, A.03-07-049, and A.03-07-050 are denied.

11. A.03-01-013, A.03-07-049, and A.03-07-050 are closed.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.